

Dean L. Engelhardt, et al.

Serial No.: 08/479,997

Filed: August 20, 2001

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REMARKS

Claims 454-567 were previously pending and under examination in this application. Furthermore, claims 454 and 511 have been amended. Attached hereto is a version of the amended claims with markings to show changes made.

The amendments to claims 454 and 511 proposed for entry are limited to expressing what are respectfully inherent or implicit features of the existing claims or clarifications thereof. Specifically, these amendments simply expressly state implicit features of a hybridization probe, e.g., that the oligo- or polynucleotide is complementary to a nucleic acid of interest, or clarify related features of the claims, e.g., that Sig is a non-radioactive label that can be detected when hybridized to the complementary nucleic acid interest or portion thereof. Notably these amendments were not among those objected to in the Advisory Action of May 30, 2001 and, consistent therewith, at the Interview of July 11, 2001, the Examiner agreed that, properly interpreted, at least some of the rejected claims, e.g., claim 454, are directed to hybridization probes. The amendments to claims 454 and 511 have also been discussed in the Appeal Brief filed herewith.

Accordingly, claims 454-567 are presently pending in this application. It is believed that the amendments hereto materially reduce or simplify the issues for appeal in this case. Furthermore, it is believed that the amendments hereto put the claims in condition for allowance. Entry of the amendments to claims 454 and 511 is, therefore, respectfully requested.

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SUMMARY AND CONCLUSIONS

No extension request or fee is believed due in connection with this filing, a Request For An Extension Of Time (5 Months) and authorization for the fee therefor having been filed with Applicants' Appeal Brief. No fee or fees are believed due in connection with this paper. In the event that any fee or fees are due, however, The Patent and Trademark Office is hereby authorized to charge the amount of any such fee(s) to Deposit Account No. 05-1135, or to credit any overpayment thereto.

If a telephone conversation would further the prosecution of the present application, Applicants' undersigned attorney request that he be contacted at the number provided below.

Respectfully submitted,



Ronald C. Fedus

Registration No. 32,567

Attorney for Applicants

**ENZO DIAGNOSTICS, INC.
c/o ENZO BIOCHEM, INC.
527 Madison Avenue, 9th Floor
New York, New York 10022
Telephone: (212) 583-0100
Facsimile: (212) 583-0150**

VERSION WITH MARKINGS TO SHOW CHANGES MADE

454. (Amended) An oligo- or polydeoxynucleotide that is complementary to a nucleic acid of interest or a portion thereof comprising at least one nucleotide having the formula.

Sig — PM — SM — BASE

Wherein PM is a phosphate moiety, SM is a sugar moiety and BASE is a base moiety selected from the group consisting of a pyrimidine, a purine and a deazapurine, or analog thereof, said PM being attached to SM, said BASE being attached to SM, and Sig being covalently attached to PM directly or through a chemical linkage, said Sig being a moiety capable of non-radioactive detection when attached to PM, [or] when said nucleotide is incorporated into said oligo- or polydeoxynucleotide, or when said oligo- or polydeoxynucleotide is hybridized to said complementary nucleic acid of interest or a portion thereof.

511. An oligo- or polyribonucleotide comprising at least one ribonucleotide that is complementary to a nucleic acid of interest, or portion thereof, comprising at least one ribonucleotide having the formula

Sig – PM – SM – BASE

wherein PM is a phosphate moiety, SM is a sugar moiety and BASE is a moiety selected from the group consisting of a pyrimidine, a purine and a deazapurine, or analog thereof, said PM being attached to SM at a position of SM selected from the 2', 3' and 5' positions, or combinations thereof, said BASE being attached to SM, and Sig being covalently attached to PM directly or via a chemical linkage, said Sig being a

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moiety capable of non-radioactive detection when attached to PM_[or] when said nucleotide is incorporated into said oligo- or polyribonucleotide, or when said oligo- or polyribonucleotide is hybridized to said complementary nucleic acid, or portion thereof, provided that when Sig is attached through a chemical linkage to a terminal PM at the 3' position of a terminal ribonucleotide, said chemical linkage is not a cleaved 3' terminal ribonucleotide previously attached to said oligo- or polyribonucleotide.